

## Product datasheet for **RG202757**

### Lumican (LUM) (NM\_002345) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Lumican (LUM) (NM_002345) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Lumican
Synonyms:	LDC; SLRR2D
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG202757 representing NM_002345 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGTCTAAGTGCATTTACTCTCTTCTGGCATTGATTGGTGGTACCAGTGGCCAGTACTATGATTATG  
ATTTTCCCTATCAATTTATGGGCAATCATCACAACTGTGCACCAGAATGTAAGTCCCTGAAAGCTA  
CCCAAGTGCCATGTACTGTGATGAGCTGAAATTGAAAAGTGTACCAATGGTGCCTCTGGAATCAAGTAT  
CTTTACCTTAGGAATAACCAGATTGACCATATTGATGAAAAGGCCTTTGAGAATGTAAGTACTGTCAGT  
GGCTCATTCTAGATCACAACTTCTAGAAACTCCAAGATAAAAGGGAGAGTTTTCTCTAAATTGAAACA  
ACTGAAGAAGCTGCATATAAACCACAACAACCTGACAGAGTCTGTGGGCCACTTCCCAAATCTCTGGAG  
GATCTGCAGCTTACTCATAACAAGATCACAAAGCTGGGCTCTTTTGAAGGATTGGTAAACCTGACCTTCA  
TCCATCTCCAGCACAATCGGCTGAAAGAGGATGCTGTTTCAGCTGCTTTTAAAGGTCTTAAATCACTCGA  
ATACCTTGACTTGAGCTTCAATCAGATAGCCAGACTGCCTTCTGGTCTCCCTGTCTCTTCTAACTCTC  
TACTTAGACAACAATAAGATCAGCAACATCCCTGATGAGTATTTCAAGCGTTTTAATGCATTGCAGTATC  
TGCGTTTATCTCACAACGAAGTGGCTGATAGTGAATACCTGGAAATCTTTCAATGTGCATCCCTGGT  
TGAGCTGGATCTGTCTATAACAAGCTTAAAAACATACCAACTGTCAATGAAAACCTTAAAACTATTAC  
CTGGAGGTCAATCAACTTGAGAAGTTTGACATAAAGAGCTTCTGCAAGATCCTGGGCCATTATCCTACT  
CCAAGATCAAGCATTGCGTTTGGATGGCAATCGCATCTCAGAAACAGTCTTCCACCGGATATGTATGA  
ATGTCTACGTGTTGCTAACGAAGTCACTCTTAAT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG202757 representing NM\_002345  
 Red=Cloning site Green=Tags(s)

MSLSAFTLFLALIGGTSQYYDYDFPLSIYQSSPNCAPCECNCPEYSYPSAMYCDELKLSVPMVPPGIKY  
 LYLRNNQIDHIDEKAFENVTDLQWLILDHNLLENSKIKGRVFSKLGKQKLLHINHNLTESVGLPKSLE  
 DLQLTHNKITKLGSEGLVNLTFIHLQHNRLKEDAVSAAFGLKSLEYLDL SFNQIARLP SGLPVSL LTL  
 YLDNNKISNIPDEYFKRFNALQYLRLSHNELADSGIPGNSFNVSSLVELDL SYNKLNKIPTV NENLENY  
 LEV NQLEKFDIKSFCKILGPLSYSIKHLRLDGNRISETSLPPDMECLRVANEVTLN

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_002345

**ORF Size:** 1014 bp

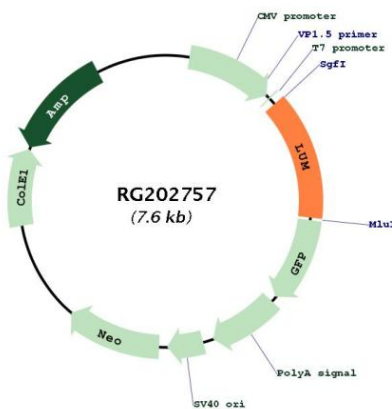
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_002345.4</a>
<b>RefSeq Size:</b>	2116 bp
<b>RefSeq ORF:</b>	1017 bp
<b>Locus ID:</b>	4060
<b>UniProt ID:</b>	<a href="#">P51884</a>
<b>Cytogenetics:</b>	12q21.33
<b>Domains:</b>	LRRNT, LRR, LRR_TYP, LRR_SD22, LRR_BAC
<b>Protein Families:</b>	Secreted Protein
<b>Gene Summary:</b>	This gene encodes a member of the small leucine-rich proteoglycan (SLRP) family that includes decorin, biglycan, fibromodulin, keratocan, epiphycan, and osteoglycin. In these bifunctional molecules, the protein moiety binds collagen fibrils and the highly charged hydrophilic glycosaminoglycans regulate interfibrillar spacings. Lumican is the major keratan sulfate proteoglycan of the cornea but is also distributed in interstitial collagenous matrices throughout the body. Lumican may regulate collagen fibril organization and circumferential growth, corneal transparency, and epithelial cell migration and tissue repair. [provided by RefSeq, Jul 2008]

## Product images:



Circular map for RG202757